

PLANT PATENT
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APPLICATION FOR UNITED STATES PLANT PATENT

for

CHRYSANTHEMUM PLANT NAMED 'DOVE BRONZE'

by

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This application claims the benefit of U.S. Provisional Application No. 60/421,380, filed October 25, 2002.

LATIN NAME OF THE GENUS AND SPECIES

Botanical classification: *Chrysanthemum morifolium*.

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VARIETY DENOMINATION

The new Chrysanthemum variety denomination is 'Dove Bronze.'

BACKGROUND OF THE INVENTION

The present invention comprises a new and distinct cultivar of Chrysanthemum botanically known as *Chrysanthemum morifolium*, and referred to by the cultivar name 10 'Dove Bronze.'

'Dove Bronze', identified as 30262-1, originated from a whole plant mutation grown in a controlled planting of an unpatented variety commercially available as 'Dove' in Chichester, West Sussex PO10 7XQ, United Kingdom. The new variety 'Dove Bronze' has been asexually reproduced by vegetative cuttings in Chichester, West Sussex, 15 United Kingdom and the distinguishing characteristics are retained through successive generations of asexual reproduction.

BRIEF SUMMARY OF THE INVENTION

'Dove Bronze' is a garden type of Chrysanthemum plant having a domed canopy of small single bronze flowers.

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Comparison with Parent

Plants of the new Chrysanthemum variety 'Dove Bronze' are similar to the parent 'Dove' in habit and growth rate. In side-by-side comparisons in Chichester, West Sussex, United Kingdom under commercial practice, plants of the new Chrysanthemum variety 'Dove Bronze' differed from the plants of the parent variety 'Dove' in the 25 following characteristic.

1. The new variety 'Dove Bronze' produces flowers bronze flowers whereas the parent 'Dove' produces pink flowers.

Comparison with Other Varieties

Plants of the new Chrysanthemum variety 'Dove Bronze' are dissimilar to the variety 'Grace' (U.S. Plant Patent No. 7,642) in plant habit and growth. In side-by-side comparisons in Chichester, West Sussex, United Kingdom, under commercial practice,
 5 plants of the new Chrysanthemum variety 'Dove Bronze' differed from 'Grace' in the following characteristics.

1. The new variety 'Dove Bronze' produces smaller sized flowers than 'Grace.'
2. The new variety 'Dove Bronze' usually produces more flowers than 'Grace.'
3. The new variety 'Dove Bronze' has a more round and domed shape than
 10 'Grace.'

BRIEF DESCRIPTION OF ILLUSTRATION

Typical specimens of the plant and flowers for the new Chrysanthemum variety 'Dove Bronze' are shown in the accompanying digital photograph. The colors shown are as true as possible within the usual limits of this kind of illustration. Figure 1 is a whole plant view of the new variety 'Dove Bronze' grown in a pot. The plant shown in the
 15 illustration is 63 days from commencement of planting outdoors in mid-June.

DETAILED BOTANICAL DESCRIPTION

The following description of the new Chrysanthemum variety 'Dove Bronze' is of plants grown outside, natural season in Chichester, West Sussex, United Kingdom in the
 20 month of June. The cultivar has not been observed under all possible environmental conditions. The phenotype may vary significantly with variations in the environment such as temperature, length of day and light intensity, without any variance in genotype. The commercial classification of the new variety is a garden Chrysanthemum.

Plants of the new variety have been grown successfully under temperature
 25 conditions averaging about 50°F at night and about 70°F to 75°F during the day under natural light conditions. The plants were grown outdoors in mid-June in 4 liter pots using loamless compost. No growth retardants were used. To produce a commercial product the plants may be pinched once with the center bud removed. The typical container size for commercial growth is 4 liters (8"). It has been observed that the shelf life of the new variety is about 25 days with a response time of about 9 weeks. The new variety is
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suitable for growth in a temperature range of 50°F to 75°F. The new variety may be produced as a pot plant. The following description is with respect to a plant produced as a garden pot plant. In the description of this new Chrysanthemum variety, color values have been taken from the Royal Horticultural Society Colour Chart (R.H.S.C.C.).

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Plant

Plant type: Pot

Habit: Domed - Round

Height: 40 cm

Width: 50 cm

10 Branching characteristics: Angular and Free Branching

Length of Lateral Branches: 14-32 cm

Number of Breaks from Pinch: 7-9

Stem Color: near 137A

Response Time: 63 days natural season

15 Vigor: Medium

Shelf Life: 25 days

Disease (Susceptibility/Resistance observed): None observed to date

Pest (Susceptibility/Resistance observed): None observed to date

Growth retardant type and treatment: No treatment necessary

20 The plants were grown for 10 weeks in natural season conditions.

Propagation:

Type: Vegetative Propagation via Stem Cuttings

Time to rooting: 12 days with soil temperatures of 70°F

Rooting habit: Fine and Fibrous

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Foliage

Number of Leaves Per Lateral Branch: 10-15

Compound or single: Single

Arrangement of Leaves: Alternate

Shape of Leaf: typically 5 lobed ovate

Size of Leaf: *Width* (cm): 1-4 *Length* (cm): 2-5.5

Leaf Apex: Acute

5 Base: Truncate

Attachment: Petioled

Aspect: Slightly Undulating

Margin: Palmately Lobed

Surface characteristics: *Top*: Very Slightly Pubescent

10 *Bottom*: Very Slightly Pubescent

Petiole: *Color*: near 139C

Length: 0.8 cm-1.2 cm

Venation : Net prominent mid-vein at underside

Color: *upper side*: near 138D

15 *under side*: near 138D

Color: Mature Leaf, *upper side*: near 137C; *under side*: near 137D

Young Leaf, *upper side*: near 138B; *under side*: near 138B

Flower

Flower appearance: Matte

20 Flower type: Single

Flower form: Flat

Flower shape: Round

Flowering habit: Cyme

Number of blossoms per branch: 8-12

25 Inflorescence form: Corymibiform

- Depth of fully expanded blossoms: 1 cm
- Diameter of fully expanded blossoms: 2–3.5 cm
- Phyllaries: *Number:* 10-12
Color: near 137C
5 *Length:* 4-8 mm
Width: 1-2 mm
Texture/Appearance: Very Slightly Pubescent
- Pedicel: *Length:* terminal: 4 cm; lateral: 7-8 cm
Color: near 136C
10 *Surface:* Pubescent
Habit: Slightly curving
Strength: Medium
- Ray florets: *Form/Shape:* Straight
Texture/Appearance : Matte
- 15 *Number per flower:* 35-38
Length: 1-1.5 cm *Width:* 3-5 mm
Apex: Rounded, Slightly Dentate
Base: Tubular
Margin: Entire
- 20 Disc florets: *Form/Shape:* Cylindrical
Texture/Appearance: Shiny
Number per flower: 125-140
Length: 1-1.5 cm; *Width:* 1 mm
Diameter of disc: 6-8 mm
- 25 Fragrance: None
- Flower Bud (at onset of color):
Length: 6 mm
Diameter: 7 mm
Form/Shape: Globular

General flower color:

1. Ray florets, *upper side*:

5 *Immature*: near 171B

Mature: near 171C

Older/Fading: near 164C

2. Ray florets, *under side*:

Immature: near 171B

10 *Mature*: near 171C

Older/Fading: near 164C

3. Disc florets:

Immature: near 17B

Mature: near 16B

15 *Older/Fading*: near 16C

4. Bud: near 145C

Flower progression with age: Color fades uniformly with age.

Reproductive Organs

Gynoecium present on Ray and Disc florets.

20 Ray florets per individual flower:

Pistil number: 35-38

Stigma color: near 144D

Stigma shape: Forked

Style color: near 144D

25 *Style length*: 4 mm

Disc florets per individual flower:

Pistil number: 100-110

Stigma color: near 150C

Stigma shape: Cylindrical

Style color: near 150C

Style length: 2-3 mm

5 Androecium present on Disc florets only.

Stamen number: 25-40

Anther shape: Cylindrical

Anther color: near 14C

Pollen color: near 12A

10 *Pollen quantity:* Abundant

Fruit and Seeds: None observed